

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A titanium alloy material ~~which can be used as a basic structural material in hydrogen absorption environments which has superior hydrogen absorption properties, and is formed from Al: 0.50-3.0% (mass%, hereafter idem in chemical compositions), and comprising~~

a Ti-Al alloy comprising residual

0.50 - 3.0 mass% of Al, and

a balance of Ti and unavoidable impurities; and

an oxide film on the Ti-Al alloy, wherein

the oxide film has a thickness of 1.0 - 100 nm; and

the oxide film comprises Al and 50 mass% or more of a crystalline oxide.

Claim 2 (Currently Amended): The titanium alloy material according to Claim 1, wherein

the unavoidable impurities comprise Fe, Mo, Ni, Nb and Mn; and

the content of each of Fe, Mo, Ni, Nb and Mn ~~which are present as impurities in the Ti-Al alloy~~ is ~~suppressed to:~~

Fe: 0.15% or less,

Mo: less than 0.10%,

Ni: less than 0.20%,

Nb: less than 1.0% and

Mn: less than 1.0%.

Claims 3-4 (Canceled)

Claim 5 (Currently Amended): The titanium alloy material according to ~~Claim 3~~
Claim 1, further comprising an Al concentration layer between the Ti-Al alloy and the oxide
layer, wherein an

the Al concentration layer having has an Al concentration in a range of from 0.8-25
mass%; and

the Al concentration of the Al concentration layer is 0.3 mass% or more higher than
the an Al concentration of the bulk part, Ti-Al alloy the Al concentration lying in the range
0.8-25%, is formed between said bulk part and said oxide film.

Claim 6 (Canceled)

Claim 7 (Currently Amended): The titanium alloy material according to Claim 5,
wherein ~~the thickness of the Al concentration layer is~~ has a thickness of
0.10 - 30 μm .

Claim 8 (Currently Amended): The titanium alloy material ~~according to~~ of Claim 1
~~which can be used~~ in contact with a steel member.

Claim 9 (New): The titanium alloy material according to Claim 1, wherein the
crystalline oxide comprises Brookite.

Claim 10 (New): The titanium alloy material according to Claim 5, wherein the
crystalline oxide comprises Brookite.

Claim 11 (New): The titanium alloy material according to Claim 5, wherein the Al concentration layer has an Al concentration in a range of from 3.45-25 mass%.

Claim 12 (New): The titanium alloy material according to Claim 11, wherein the crystalline oxide comprises Brookite.

Claim 13 (New): The titanium alloy material according to Claim 1, wherein the Ti-Al alloy consists of

0.50 - 3.0 mass% of Al, and
a balance of Ti and unavoidable impurities.

Claim 14 (New): The titanium alloy material according to Claim 1, wherein the crystalline oxide is produced by a process comprising oxidizing the Ti-Al alloy.

Claim 15 (New): A method of making a titanium alloy material, the method comprising

oxidizing a Ti-Al alloy comprising
0.50 - 3.0 mass% of Al, and
a balance of Ti and unavoidable impurities; and
producing the titanium alloy material of Claim 1.